

Dianne R. Nielson, Ph.D.

Executive Director

DIVISION OF AIR QUALITY Richard W. Sprott *Director* JON M. HUNTSMAN, JR. Governor

> GARY HERBERT Lieutenant Governor

> > DAQ 009-06

MEMORANDUM

TO: Air Quality Board

THROUGH: Richard W. Sprott, Executive Secretary

FROM: Colleen Delaney, Environmental Scientist, and

Jim Schubach, Environmental Engineer

DATE: February 24, 2006

SUBJECT: Final Adoption: Amend R307-410, Permits: Emission Impact Analysis

On November 2, 2005, the Board proposed changes to R307-410, *Permits: Emission Impact Analysis*. A 45-day public comment period was held, and a public hearing was conducted on December 14, 2005. No comments related to this rule were made at the public hearing. One written comment was received and there was one staff comment. A summary of the comments and the staff response is attached to this memo.

Recommendation: UDAQ recommends that the Board adopt R307-410 with the minor changes that are described in the response to comments (see attached revision to R307-410).

Response to Comments
Proposed revisions to R307-410 and R307-101-2

Comment: R307-410 establishes modeling thresholds that are based on the federal rules. These rules do not adequately address Utah's airsheds that are bounded by mountains and subject to persistent inversions. The US standard for NOx is an annual standard, but other

nations set shorter-term standards. Shorter-term NOx standards are important in Utah because NOx is a precursor to ozone and $PM_{2.5}$. Permitting actions allow high short term NOx averages because the annual average does not meet the threshold level. The rule would be more effective if the threshold was based on a shorter averaging period. [Wasatch Clean Air Coalition]

Response: The modeling thresholds in R307-410 are based on the federal significance level that was established in the PSD program. Unlike the PSD program, the thresholds apply to all sources, not just major sources. The threshold level for NOx is 40 tons/year. UDAQ has found that the current thresholds have worked well to identify sources that would likely affect NAAQS levels in areas close to the source. The threshold level determines when a source is required to submit a modeling analysis with the NOI. If the executive secretary has reason to believe that a source that falls below the threshold will be a problem, then modeling can be completed in-house. In all cases, the executive secretary cannot issue an AO if it causes a violation of the NAAQS. Ozone and PM_{2.5} problems in Utah are primarily due to the reactions of precursor emissions. Current permitting models are not effective to determine the effect of a source of NOx on either ozone or PM_{2.5}. For this reason, Utah has adopted an emissions offset program for NOx that applies in nonattainment and maintenance areas for ozone and PM_{2.5}. This program has been an effective mechanism for addressing the impact of new and modified sources of NOx.

Staff Comment: The modeling requirements for criteria pollutants and hazardous air pollutants are not part of Utah's SIP and are not required under the federal requirements for a minor source permitting program. Therefore, the language in the purpose statement that refers to 40 CFR 51.160 has been removed from the rule.